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United States Department of the Interior  
Fish and Wildlife Service

Wildlife Leaflet .231

Chicago, Illinois

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February 1943

DEC 13 1943

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U.S. DEPARTMENT OF AGRICULTURE

VENT DISEASES OF DOMESTIC RABBITS

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INTRODUCTION

Misinformation concerning the cause and contagiousness of certain diseases affecting the external reproductive organs of domestic rabbits has frequently influenced breeders to dispose of large numbers of their breeding animals at a loss, when the intelligent application of more conservative control measures would have been effective. Unscrupulous dealers have profited by this lack of information among rabbit breeders and obtained stock for a small part of its actual value; when with a little additional attention the animals could have been restored to health. The method usually employed by such dealers is to examine several breeding does, and if an abnormal condition is found around the external genitalia (vent), they pronounce the animals affected with "vent disease" and then persuade the owner to dispose of them promptly. When a rabbit breeder observes some condition in his animals that he does not understand, it is advisable to consult a veterinarian or a diagnostic laboratory to obtain an accurate diagnosis and unbiased advice concerning control measures.

SPIROCHETOSIS

Spirochetosis, or true vent disease of domestic rabbits, is caused by a micro-organism (Treponema cuniculi), which is transmitted from one animal to another in mating. The disease affects rabbits of both sexes, but is not transmissible to other domestic animals or to man. The interval between the time of infection and the manifestation of symptoms of the disease may vary from two to four weeks, and unless careful routine observations are made, the disease may become widespread and most of the breeding animals may contract it before it is detected. The animals probably contract the disease more readily when mating or when other conditions have caused a break in the skin or mucous membrane. It is possible in a consid-

NOTE: This leaflet supersedes Wildlife Research and Management Leaflet BS-79 issued in January 1937 by the Bureau of Biological Survey under the Department of Agriculture.

erable number of cases to reproduce the disease with secretions containing this organism from the diseased parts of affected animals, but is generally difficult to effect artificial transmission to healthy animals that have no abrasions.

### Symptoms

The first symptoms of spirochetosis are usually the appearance of small denuded areas around the vent and their slow enlargement until they become covered with a heavy scab. The severity of the disease often varies with the individual animal. In some cases the affected part will remain red, congested, and slightly ulcerated, without the usual brown crusts. The denuded areas are usually confined to the external genitalia, but in some cases there is a spread to the region of the lips and eyelids. This probably results from contact with affected parts, since the organism is reported to be confined to the immediate vicinity of the lesions and is not found in the blood or internal organs. In the male, the typical small denuded areas may be present on the penis or inside the prepuce (sheath), making a thorough examination necessary to determine the extent of the disease. If there are no complications, affected animals usually remain in good physical condition, exhibiting no other symptoms of the disease. Since in a superficial examination the disease is easily confused with similar conditions arising from entirely different causes, it is advisable to submit one or more of the suspected animals to a diagnostician or to a laboratory, as a positive diagnosis is possible only by a detailed microscopic examination.

### Prophylaxis

The first essential in the prevention of spirochetosis in domestic rabbits is a thorough examination of the external genitalia in both animals before each mating. An animal that shows lesions of any kind around these parts should not be used for breeding purposes until the condition has disappeared. Affected animals should be treated first by clipping the hair from around the affected area and removing all the filth and crusts possible without causing the part to bleed, and then by sponging with a piece of absorbent cotton soaked in boric acid solution or warm water to which a pinch of salt has been added. The remaining scabs can probably be removed without difficulty during subsequent cleanings.

After the area has thoroughly dried, the sores should be painted with a liberal application of tincture of iodine. Mercurial ointment (blue ointment) has been reported beneficial in such infections, and when used it should be applied in a thin coating to the affected parts after they have been cleaned in the manner above described. Affected animals should be treated three or four times a week, care being taken to clean the parts thoroughly before each treatment. In treating an infected buck, iodine may be used on the external lesions, but in case it is necessary to treat a lesion on the penis or inside the sheath, a less irritating antiseptic, such as a 1-percent solution of potassium permanganate, should be used.

Lesions usually heal within 10 days to 2 weeks, but it is essential that recovered cases be observed at regular intervals, as the disease may occasionally recur. Recovered animals can usually be bred without danger of infecting others as soon as the lesions have entirely healed.

It is necessary to keep the floors of the hutches clean and dry at all times, as the presence of urine-soaked bedding or manure tends to aggravate the disease. The small percentage of rabbits that fail to respond to the above treatment, and those not sufficiently valuable to justify intravenous or intramuscular treatment by a veterinarian, should be disposed of so that they will not endanger healthy stock.

There is no evidence that the disease is hereditary, or that it is contracted other than in mating; consequently, so far as the young from an infected doe are concerned, there should be no objection to saving them for breeding purposes.

### URINE BURN

Small denuded areas around the external genitalia of domestic rabbits caused by irritation from urine are frequently confused with vent disease and diagnosed as such. In severe cases of urine burn, however, the small raw areas may rapidly enlarge and coalesce until the entire area is denuded of hair and skin. These areas may become infected with contaminating organisms and result in a purulent discharge. Unless the condition is given prompt attention there may be a fatal termination. In less severe cases the lesions become covered with a heavy scab, and attempts to remove these without precautions may cause severe hemorrhage. It is this type of case that closely resembles and is most frequently mistaken for infectious spirochetosis.

Urine burn usually results from the animal being in constant contact with urine-soaked bedding or waste material on the floor of the hutch. A similar condition has been observed in rabbits following an excessive use of caustic disinfectants in cleaning the hutch floor.

Solid wooden floors or ~~lath~~-bottom hutches are frequently responsible for urine burn, as wood of the quality ordinarily used in construction absorbs the urine and this becomes a constant source of irritation to the feet, hocks, and external genitalia. Where such a condition exists, it may be controlled by thoroughly scrubbing the floor three or four times a week, subsequently flushing it each time with running water. If such measures are not practicable, it may be necessary to remove periodically the urine-saturated part of the floor and replace with fresh wood or hardware cloth.

The prevention of urine burn and resulting infections depends entirely upon sanitary precautions, such as keeping the hutch free of urine-soaked bedding, hair mats, and manure. Mild cases usually recover promptly without other treatment than removal of the cause. More severe cases are successfully treated with tincture of iodine, as above described.

## MISCELLANEOUS INFECTIONS

Domestic rabbits are subject also to pyogenic (filth) infections around the external reproductive organs. The condition is at times mistaken by the rabbit breeder for infectious spirochetosis. Pyogenic infections are usually revealed in the form of small white pustules around the vent, which are filled with a white cheesy exudate. Occasionally one of the pustules ruptures and the spot becomes covered with a heavy scab. The condition is easily prevented by keeping the hutch floors clean and dry. Affected animals should be treated by opening the pustules with a sterile needle or small knife and pressing out the exudate, then painting the area with tincture of iodine. Recovery is usually rapid, but the animal should not be mated until the pustules heal.

During routine examinations of breeding rabbits for abnormal conditions, it is advisable to clean away any dirt or filth that may be present around the genitalia. In the operation, the small pockets normally present on either side of the vent should not be overlooked. These pockets usually contain surplus sebaceous material that should be removed with a swab moistened with a mild antiseptic solution.